

BROWSING JPEG IMAGES USING MPEG HARDWARE CHIPS

ABSTRACT OF THE DISCLOSURE

Rapid throughput of still image compressed data (e.g. JPEG) is achieved for presentation of images in rapid succession for browsing or browsing by panning within large images by using a hardware decoder adapted for presentation of moving images to reduce the processing load which must be performed in accordance with software although the still image data is incompatible with still image data in many respects; some of which necessarily lead to a loss of image fidelity. The still image data is partially decoded (e.g. entropy decoded) in software processing and re-encoded and reformatted to a form which can at least be accepted by the hardware decoder even though not compliant with any particular moving picture data standard (e.g. MPEG). Storage in the hardware decoder is reallocated to provide, in combination with a reduction of slower software processing, a throughput increase of four-fold or more. Software processing of the still image data is also allowed to proceed and the result substituted for the result of the hardware decoding if a given image is viewed for a time sufficient for the software image processing to be completed.